DUF6 Depleted Uranium Hexafluoride Conversion Project	DUF6-UDS-PLN-080 Revision 0 August 2007

PORTSMOUTH STORM WATER POLLUTION PREVENTION - BEST MANAGEMENT PRACTICES PLAN

Uranium Disposition Services, LLC
Burns and Roe Enterprises, Inc.
Energy*Solutions*, LLC
AREVA NP Inc

U.S. Department of Energy
Portsmouth Paducah Project Office
Portsmouth Site
Paducah Site

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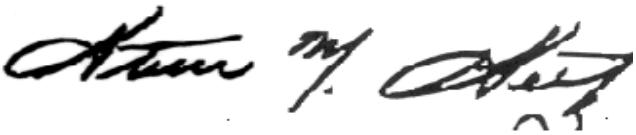
Primary Author

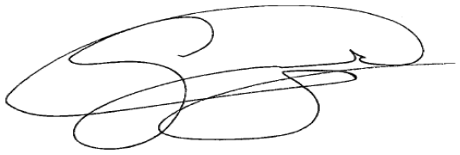
Steven M. Gertz



UDS Environmental Lead Date: 08/15/2007

Approval

John McCoy



Portsmouth Plant Manager Date: 08/15/2007

Approval

Don Parker

UDS ES&H/Security Manager Date: 08/15/2007

Approval

Steve Polston

UDS Project Manager Date: 08/15/2007

DISCLAIMER

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PORTSMOUTH STORM WATER POLLUTION PREVENTION - BEST MANAGEMENT PRACTICES PLAN

Revision Summary

TITLE	DOCUMENT NO.	REV.
Portsmouth Storm Water Pollution Prevention - Best Management Practices Plan	DUF6-UDS-PLN-080	0
REVISION DESCRIPTION Initial Issue		

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LIST OF FIGURES

LIST OF ACRONYMS

BMPs	Best Management Practices
CWA	Clean Water Act
DOE	U.S. Department of Energy
DUF_6	Depleted uranium hexafluoride
ES&H	Environment, Safety, and Health
FWPCA	Federal Water Pollution Control Act
NPDES	National Pollutant Discharge Elimination System
PAD	Portsmouth Gaseous Diffusion Plant
PCBs	Polychlorinated biphenyls
SWPP	Storm Water Pollution Prevention
UDS	Uranium Disposition Services, LLC

PORTSMOUTH STORM WATER POLLUTION PREVENTION - BEST MANAGEMENT PRACTICES PLAN

1 INTRODUCTION

This Storm Water Pollution Prevention - Best Management Practices Plan (SWPP) covers operations at Uranium Disposition Services, LLC's (UDS) Depleted Uranium Hexafluoride (DUF_6) Conversion Facility and associated DUF_6 cylinder storage yards. It has been developed to comply with the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), and the UDS's National Pollutant Discharge Elimination System Permit OIS00034*AD (NPDES). This SWPP describes the facility and its operations, identifies potential sources of storm water pollution, and recommends appropriate Best Management Practices (BMPs) to reduce the discharge of pollutants in storm water runoff, and to assure meeting the effluent limitations listed in UDS's NPDES Permit.

2 OBJECTIVES

The development, implementation, and maintenance of this SWPP will provide UDS with the tools to reduce pollutants contained in both storm and non-storm water discharges through:

- Identifying the sources of storm water and its potential contaminants,
- Identifying and prescribing appropriate source area control BMPs to prevent storm water contamination from occurring, and
- Identifying and prescribing storm and non-storm water treatment BMPs to reduce pollutants prior to discharge.

To meet these objectives this SWPP includes:

- Identification of the SWPP coordinator with a description of this person's duties,
- Identification of the SWPP implementation team members,
- Descriptions of the facility and its storm water drainage and effluent discharge systems,
- Identification of potential storm water contaminants,
- Descriptions of storm water management controls and BMPs, and
- Descriptions of the implementation schedule and provisions for review and amendment of this SWPP

3 SWPP COORDINATOR AND IMPLEMENTATION TEAM

The SWPP coordinator for this facility is the Portsmouth ES&H lead. The ES&H lead's duties include:

- Creating an SWPP implementation team,
- Implementing this SWPP,
- Overseeing the BMPs identified in this SWPP,
- Implementing and overseeing any needed employee training,
- Conducting or providing for inspection of monitoring activities,
- Identifying other potential pollutant sources and assuring they are added to this SWPP,

- Identifying any deficiencies in this SWPP and assuring they are corrected,
- Preparing and submitting any required reports, and
- Ensuring that any changes in facility operations are reflected in this SWPP

Assisting the ES&H lead in the above tasks are the facility managers assigned to particular facilities.

4 FACILITY DESCRIPTION

The DUF_6 Conversion Facility Site, also known as the Lithium Warehouse Site, is approximately 26 acres, with approximately 8.5 acres being used for the actual Conversion Facility. Figure 1 depicts the site location and surrounding areas. The site is known as the Lithium Warehouse Site because the buildings remaining on the site, X-744S, X-744T, and X-744U, which are now empty, have previously been used for storing containerized lithium hydroxide monohydrate. These warehouses are constructed of steel frames, with concrete slab floors, galvanized steel siding, and roof panels. These buildings, except for X-744-S, will be razed by others and are sufficiently distant from the Conversion Facility Site to have minimal impact. The remainder of the Conversion Facility Site was a grassed field resulting from site grading at the time of original construction of the Gaseous Diffusion Plant.

The DUF_6 Conversion Facility Site is bounded on the west by a north-south asphalt road, Road C, separating the site from the X-6619 Sewage Treatment Plant further west. On the north side, the site limits follow a drainage gully generally west east to the Truck Access Road to the Portsmouth Site. The boundary then follows the Truck Access Road southeast to south to a location just north of the X-108C Fire Training Facility. The limits then travel in a westerly direction north of the previous locations of the X-103 Fire Training Academy and X-616 Water Treatment Facility (both demolished) and the X-616 lagoons (remediated) to a point just west of the X-744S Warehouse. The boundary then follows a gravel roadway south to the Construction Road and then west on the Construction Road.

5 CYLINDER YARDS MANAGED BY UDS

In addition to the Conversion Facility Site, there are several cylinder yards used for storage at PORTS for which UDS has management responsibility. These are X-745C, X-745E, and X-745G-1, which are shown in Figure 1. UDS's management responsibilities include surveillance and maintenance of DOE's inventory of depleted uranium hexafluoride, low-enrichment uranium hexafluoride, natural assay uranium hexafluoride, and heel cylinders, maintaining them in safe storage until ultimate disposition.

Yard X-745C is approximately 2000 feet north of the Conversion Facility Site, located on both sides of 19th Street west of Scioto Avenue and bounded on the west by B Road. Yard X-745E is approximately 2800 feet north of the Conversion Facility Site, bounded by 25th Street to the south, Warren Avenue to the west, Wood Avenue to the east, and north and north-west by Perimeter Road. Yard X-745G-1 is approximately 4000 feet north north west of the Conversion Facility Site just north of Perimeter Road, approximately 400 feet south of the X-230L North Holding Pond.

6 SITE STORM WATER DISCHARGE

Site storm water flows to a series of on-site catch basins, which discharge through UDS Outfall 001 to the West Ditch, located along the Site's northern boundary. This ditch flows to the west

and initially empties into the X-230J5 Northwest Holding Pond, where material suspended in the effluent can settle, and oil can be separated from the water prior to its discharge from United State Enrichment Corporation's Outfall 10 to the Scioto River.

Similar to the Site's storm water, storm water from Cylinder Yard X-745C, Outfall 002, drains west into the West Ditch and empties into the X-230J5 Northwest Holding Pond prior to flowing to the Scioto River. Storm water from Yards X-745E, Outfall 003, and X-745G-1, Outfall 004, drains north to the X-230L North Holding Pond prior to entering Little Beaver Creek, which flows west, and empties into Big Beaver Creek.

7 IDENTIFICATION OF STORM WATER POLLUTANTS

Pollutants of concern, i.e., those pollutants that have the potential to be present in storm water runoff, at the Site and its associated cylinder yards are polychlorinated biphenyls (PCBs) and suspended solids.

PCBs are present in the paint on some of the cylinders stored in the cylinder yards, in the cylinder staging area, and on the cylinder aging pads. During rainstorms, there is the potential, albeit vanishingly small, for leaching of PCBs from the cylinder's painted surface for discharge into the West Ditch and the X-230L North Holding Pond. Additionally, paint particles that have delaminated from the cylinders and fallen to the ground could be translocated and follow the same pathways.

Suspended solids that could be present in the discharge at Outfalls 001, 002, 003, and 004, would be the result of erosion of the ground surface in the cylinder yard's drainage pathways and potentially unpaved portions of the Site.

8 STORM WATER CONTROLS

The storm water controls, BMPs, identified for implementation at the DUF_6 Conversion Facility Site and associated cylinder yards that UDS manages for DOE, can be classified into source controls, operational controls, and engineered controls. Several of the controls described in the following sub-sections are mandatory and so noted, while others will be implemented as appropriate to assure that storm water discharges meet the requirements of NPDES Permit OI00034*AD.

8.1 SOURCE CONTROLS

Source controls generally consist of good housekeeping and maintenance of Site and cylinder yard cleanliness. The following mandatory BMPs, which serve to prevent storm water contamination, will be implemented:

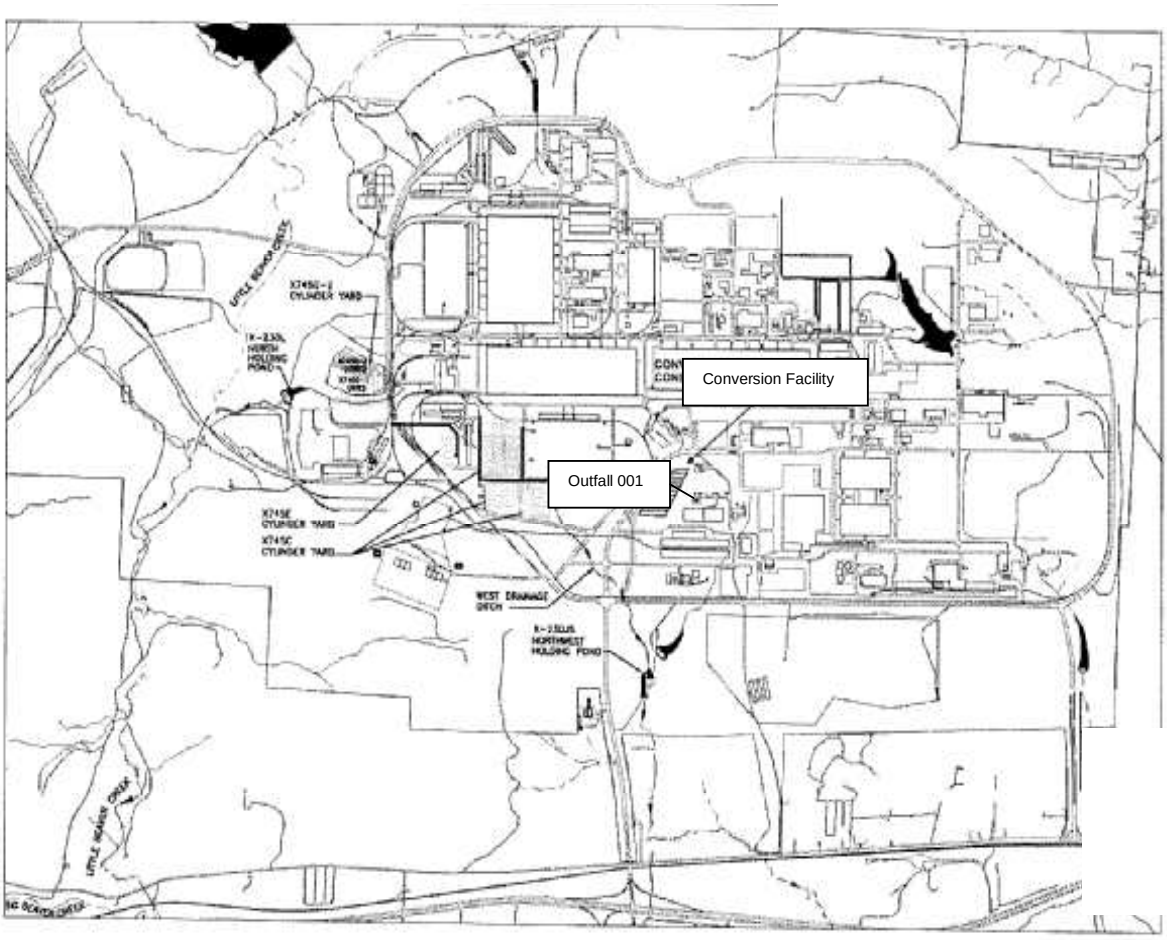

Figure 1 - Portsmouth DUF_6 Conversion Facility Site

Quarterly monitoring for PCBs and in storm water runoff and sediments, and monthly monitoring for radioactivity in storm water runoff in the cylinder yard's drainage pathways.

- Development of a Source Control Plan and remediation of contaminated sediments, if required as based on the results of the quarterly monitoring.

- Periodic visual inspections of the cylinder yards and their drainage pathways, and clean-up for proper disposal of any paint chips and related debris that may be encountered

- Periodic visual inspections of the Site and clean-up for proper disposal of any paint chips and other debris that may be encountered

- Clean-up for proper disposal of any paint chips and related debris from the ground and cylinder haulers resulting from the transport of the DUF_6 cylinders

Additional information on cylinder and cylinder yard maintenance and movement of cylinders is found in UDS's *Cylinder Surveillance and Maintenance Plan* (DUF6-UDS-PLN-011).

Additional information on management of PCBs and paint chips in the cylinder yards and their drainage pathways is found in the U.S. Environmental Protection Agency's "TSCA Approval for Storage for Disposal of PCB Bulk Product (Mixed) Waste" issued to DOE on June 1, 2005.

8.2 OPERATIONAL CONTROLS

Operational controls consist of those continuing activities to prevent, mitigate, or treat storm water contamination. The following mandatory BMPs will be implemented:

- Unpaved areas of the Site, to the extent practical, shall be maintained with an appropriate vegetative cover, or covered with rock, or other suitable materials, to prevent soil erosion.

- Site storm water drains and conduits shall be inspected periodically, cleaned, and repaired as required to assure adequate unimpeded flow to Outfall 001.

- Outfall 001 shall be inspected periodically, cleaned, and repaired as required to maintain the outfalls capacity and outflow characteristics.

The following BMP will be implemented as and if needed as determined by the SWPP coordinator:

- Filtering the outflow at Outfall 001 prior to its entering the West Ditch to lower its suspended solids and particulate content.

8.3 ENGINEERED CONTROLS

The engineered BMP described below will be implemented in a graded approach determined by the SWPP coordinator, if and as required, based on the discharge monitoring results required by NPDES Permit OI00034*AD for Outfall 001.

- Emplacement and maintenance of hay bales, silt fences, rock dams, and/or other suitable controls in and abutting portions of the West Ditch and cylinder yard drainage pathways to trap and retain sediments and particulates.

9 SPILL PREVENTION AND CONTROL

In addition to the sources and pollutants of concern that may be found in storm water described in this SWPP, there are other materials used, stored, or produced at the DUF_6 Conversion Facility that, if spilled or released, could contaminate storm water. These materials include, for example, hydrofluoric and sulfuric acids, calcium and potassium hydroxide, and various water treatment chemicals. The pollution prevention and contingency response program for these materials is discussed in UDS's Portsmouth DUF6 *Conversion Facility SPCC, RCRA Contingency, and PPC Plan* (DUF6-UDS-PLN-082).

10 EMPLOYEE TRAINING

Employee training to inform appropriate personnel of the components, goals, and requirements of this SWPP will be accomplished as follows:

- Employees directly involved with the implementation of this SWPP, and those employees whose responsibilities may interface with this SWPP, will be required to read and signify their understanding of its goals and components.

- Employees that have specific tasks associated with this SWPP, e.g., installation and maintenance of storm water controls, will receive on-the-job-training such that they can execute their tasks safely and effectively.

11 IMPLEMENTATION SCHEDULE

The implementation schedule for the action items described in this SWPP is shown in the table below.

SWPP Action Item	**Implementation**
Employee training	Periodically
Site and cylinder yard visual inspections	Periodically
Cylinder yard drainage pathway monitoring	Quarterly
Maintenance of site vegetation	As required
Inspect and clean storm water system catch basins	As required
Filter the discharge at Outfall 001	As required
Emplacement of storm water controls	As required

12 REFERENCES

1. Ohio Environmental Protection Agency, NPDES Permit OI00034*AD, [Month Day], 2007

2. Portsmouth DUF6 Conversion Facility *SPCC, RCRA Contingency, and PPC Plan*, DUF6-UDS-PLN-082, In Draft

3. *Cylinder Surveillance and Maintenance Plan*, DUF6-UDS-PLN-011, February 2007

4. U.S. Environmental Protection Agency, TSCA Approval for Storage for Disposal of PCB Bulk Product (Mixed) Waste, June 1, 2005